

**IN THE CLAIMS:**

Claims 7, 10, 11, 19, 20, 21, 22, and 29 are amended, claims 8 and 9 are canceled, and new claims 30 through 35 are added. All cancellations and amendments are made without prejudice or disclaimer. Claims 1 to 6 and 12 to 18 were previously canceled.

**Listing of Claims:**

Claims 1 to 6 (Canceled).

7. (Currently amended) ~~A marker vaccine~~ An immunogenic composition for marking exposure of a subject to wild-type *Salmonella*, comprising an immunologically effective amount of a mutated bacterium; and a pharmaceutically acceptable carrier; and an adjuvant, said mutated bacterium being selected from the group consisting of the *Salmonella* species *typhimurium*, *enteritidis*, *choleraesuis*, *dublin*, *abortus-ovi*, *abortus-equi*, *derby*, *hadar*, *heidelberg*, *agona*, and *arizonae*, that in its wild type form carries flagella, said mutated bacterium ~~lacking~~ not capable of inducing an immune response to flagellin due to a mutation in a gene of the flagellar biogenesis pathway, said bacterium being in live attenuated form.

8. (Canceled).

9. (Canceled).

10. (Currently amended) The ~~marker vaccine~~ immunogenic composition according to claim 7, ~~comprising an~~ wherein the adjuvant is selected from the group consisting of Freund's Complete adjuvant, Freund's Incomplete adjuvant, vitamin E, non-ionic block polymers, muramyl dipeptides, immune stimulating complexes, saponins, mineral oil, vegetable oil, Carbopol, *E. coli* heat-labile toxin, *Cholera* toxin, aluminum hydroxide, aluminum phosphate, aluminum oxide, oil-emulsions, and vitamin-E solubilisate.

11. (Currently amended) The ~~marker vaccine~~ immunogenic composition according to

claim 7, in a freeze-dried or spray-dried form.

Claims 12 to 18 (Canceled).

19. (Currently amended) ~~A marker vaccine~~ An immunogenic composition for marking exposure of a subject to wild-type *Salmonella*, comprising an immunologically effective amount of a mutated bacterium, and a pharmaceutically acceptable carrier, and an adjuvant, said mutated bacterium being selected from the group consisting of the *Salmonella* species *typhimurium*, *enteritidis*, *choleraesuis*, *dublin*, *abortus-ovi*, *abortus-equi*, *derby*, *hadar*, *heidelberg*, *agona*, and *arizonae*, that in its wild type form carries flagella, said mutated bacterium lacking at least one antigenic determinant of flagellin and not being capable of inducing an immune response to flagellin due to a mutation in a gene of the flagellar biogenesis pathway or flagella found in its wild-type form, and said mutated bacterium being inactivated.

20. (Currently amended) A vaccine for the protection of animals against Salmonellosis strains, comprising:

an immunologically effective amount of a mutated *Salmonella typhimurium* bacterium that in its wild type form carries flagella, said mutated *Salmonella typhimurium* bacterium ~~lacking~~ not capable of inducing an immune response to flagellin due to a mutation in a gene of the flagellar biogenesis pathway and being in live attenuated form, and  
a pharmaceutically acceptable carrier comprising water, a solution of physiological salt concentration, SPGA, sorbitol, mannitol, starch, sucrose, glucose, dextran, albumin, casein, bovine serum, skim milk, or phosphate buffer.

21. (Currently amended) ~~The A vaccine of claim 20, wherein the~~ for the protection of animals against Salmonellosis strains, comprising:

an immunologically effective amount of a mutated *Salmonella typhimurium* bacterium that in its wild type form carries flagella, said mutated *Salmonella typhimurium* bacterium lacking flagellin, comprises and comprising an immunologically effective amount of a *Salmonella typhimurium* strain STMP mutated bacterium, and

a pharmaceutically acceptable carrier.

22. (Currently amended) An improved *Salmonella* vaccine, having an immunologically effective amount of a *Salmonella* bacterium and a pharmaceutically acceptable carrier, the improvement comprising the *Salmonella* bacterium ~~being a~~ comprising an inactivated mutated bacterium that in its wild type form carries flagella, but in its mutated form is no longer capable to induce ~~antibodies against at least one antigenic determinant of~~ an immune response to flagellin or flagella in an animal, said mutated bacterium including a mutation in a gene of the bacterium's flagellar biogenesis pathway; and an adjuvant.

23. (Previously presented) The improved *Salmonella* vaccine of claim 22, wherein the mutated bacterium is selected from the group consisting of the *Salmonella* species *typhimurium*, *enteritidis*, *choleraesuis*, *dublin*, *abortus-ovi*, *abortus-equi*, *derby*, *hadar*, *heidelberg*, *agona*, and *arizonae*.

24. (Previously presented) The improved *Salmonella* vaccine of claim 22, wherein the mutated bacterium lacks flagellin.

25. (Canceled).

26. (Canceled).

27. (Previously presented) The improved *Salmonella* vaccine of claim 22, further comprising an adjuvant.

28. (Previously presented) The improved *Salmonella* vaccine of claim 22, in a freeze-dried or spray-dried form.

29. (Currently amended) ~~A~~ An improvement in a marker vaccine, consisting of comprising a *Salmonella* bacterium, the improvement comprising:

an immunologically effective amount of a mutated bacterium that in its wild type form carries flagella, said mutated bacterium ~~lacking~~ not capable of inducing an immune response to flagellin due to a mutation in a gene of the flagellar biogenesis pathway and being selected from the group consisting of the *Salmonella* species *typhimurium*, *enteritidis*, *choleraesuis*, *dublin*, *abortus-ovi*, *abortus-equi*, *derby*, *hadar*, *heidelberg*, *agona*, and *arizonae*, and a pharmaceutically acceptable carrier, wherein the marker vaccine is in a freeze-dried or spray-dried form.

30. (New) The immunogenic composition according to claim 19 in a freeze-dried or spray-dried form.

31. (New) The improved marker vaccine of claim 29, wherein the mutated bacterium is in live attenuated form.

32. (New) The improved marker vaccine of claim 29, wherein the mutated bacterium lacks flagellin.

33. (New) The improved marker vaccine of claim 29, further comprising an adjuvant.

34. (New) In an immunogenic composition including a *Salmonella* bacterium, the improvement comprising:

a lyophilized immunogenic composition comprising a mutated *Salmonella* bacterium, said *Salmonella* bacterium selected from the group consisting of the *Salmonella* species *typhimurium*, *enteritidis*, *choleraesuis*, *dublin*, *abortus-ovi*, *abortus-equi*, *derby*, *hadar*, *heidelberg*, *agona*, and *arizonae*, said *Salmonella* bacterium in its wild type form carrying flagella, said mutated *Salmonella* bacterium lacking at least one antigenic determinant of flagellin and not being capable of inducing an immune response to flagellin due to a mutation in a gene of the flagellar biogenesis pathway.

35. (New) The improved immunogenic composition according to claim 34, further comprising an adjuvant.